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10/711,342	09/13/2004	Shih-Yuan Huang	IEIP0017USA	5341

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EXAMINER	
GOODCHILD, WILLIAM J	

ART UNIT	PAPER NUMBER
2145	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/711,342	HUANG, SHIH-YUAN	
	Examiner	Art Unit	
	WILLIAM J. GOODCHILD	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 September 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-48* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-48* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09/13/2004* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 22-23, 27-28, 30, 38, 40 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by IPMI, "Intelligent Platform Management Interface Specification", v1.5, (hereinafter IPMI Spec).

Regarding claim 22, IPMI Spec discloses a channel center which receives/sends an IPMI message from message sources [page 17, 1.6.25, paragraph 2];
a plurality of message service modules which designates each IPMI message a default execution procedure, correspondingly [page 16, paragraph 1.6.23];
a programmable-configured message sheet which allows the user to define the corresponding relation between each IPMI message and said message service module [page 16, paragraph 1.6.23]; and
a plurality of programmable-configured message processing units which concurrently multi-process the IPMI messages to enable the advanced IPMI system for configurable execution performance, by way of each message processing unit looking up the corresponding message service module of the message sheet according to each IPMI

message and initiating the execution procedure of the message service module for executing the IPMI message [page 16, paragraphs 1.6.23 – 1.6.24].

Regarding claim 23, IPMI Spec discloses the message processing unit is a thread and the execution procedure of the message service module is a routine [paragraph 1.9]

Regarding claim 27, IPMI Spec discloses an operating system (OS) management module having multiple specific mapping functions for communicating with different types of OS, allowing the advanced IPMI system to function with different OS [page 8, paragraph 1.6.2 – 1.6.3, figure 1-2];
a hardware management module having a plurality of driver units for communicating with different baseboard management controller (BMC), allowing the advanced IPMI system to function in different hardware environments [page 8, paragraph 1.6.2 – 1.6.3 and figure 1-2].

Regarding claim 28, IPMI Spec discloses a sensor unit having an electrically erasable programmable read only memory (EEPROM) which stores a sensing event of a physical change in a host system [figure 1-2, paragraph 1.6.14, figure 2-1]; and
a memory control unit which regularly poll a new sensing event in the EEPROM of the sensor unit allowing the cache unit to access and store the sensing event [figure 1-2, paragraph 1.6.14, figure 2-1].

Regarding claim 29, IPMI Spec discloses the cache unit is a random access memory (RAM) and the sensor unit is an I^2C sensor [paragraph 29.15 and figure 2-1].

Regarding claim 30, IPMI Spec discloses at least an I^2C sensor for sensing a physical change in a host system [figure 2-1];
a plurality of I^2C driver software for driving different I2C sensors [paragraph 29.15]; and an I^2C driver management unit for managing said plurality of I2C driver software with an application interface [figure 2-1, paragraph 29.15].

Regarding claim 38, IPMI Spec discloses a channel center receiving at least one IPMI message from message sources [page 17, paragraph 1.6.25];
by a plurality of programmable-configured message processing units, multi-processing concurrently the IPMI messages, each initiating according to each IPMI message a message service module having a default execution procedure [page 16, paragraph 1.6.23].

Regarding claim 40, IPMI Spec discloses looking up the corresponding message service module of a programmable-configured message sheet according to the IPMI message and initiating the execution procedure of the message service module for executing the IPMI message, the message sheet defining the corresponding relation between every IPMI message and the message service module [page 16, paragraphs 1.6.23 – 1.6.24].

Regarding claim 45, IPMI Spec discloses storing by a sensor unit a sensing event of a physical change in a host system in an electrically erasable programmable read only memory (EEPROM) [figure 1-2, paragraph 1.6.14 and figure 2-1];
polling regularly by a memory control unit a new sensing event in the EEPROM of the sensor unit [figure 1-2, paragraph 1.6.14 and figure 2-1];
controlling a cache unit for accessing and storing a new sensing event of the EEPROM of the sensor unit [figure 1-2, paragraph 1.6.14 and figure 2-1]; and
reading by the memory control unit the sensing event from the cache unit according to the request of message sources [figure 1-2, paragraph 1.6.14 and figure 2-1].

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-21, 24-26, 31-37, 39, 41-44 and 46-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over IPMI Spec, and further in view of Khacherian et al., (US Publication No. 2003/0063618), (hereinafter Khacherian).

Regarding claim 1, IPMI Spec discloses an IPMI message subsystem having a channel center used to receive/send an IPMI message from message sources [IPMI Spec, page

17, 1.6.25, paragraph 2], and having a message execution group which initiates a corresponding execution procedure with respect to each IPMI message [IPMI Spec, page 16, paragraph 1.6.23];
an IPMI core subsystem having a plurality of application units at least one which executes the IPMI message according to the execution procedure of the IPMI message subsystem [IPMI Spec, page 16, paragraph 1.6.23]. IPMI Spec fails to specifically disclose a central message buffer unit having a memory block which provides a pointer of a corresponding address in the block for temporary storage of each IPMI message wherein each said subsystem just transmits the pointer there between thereby reducing times of reading the IPMI message and raising the performance of the IPMI system. However, Khacherian discloses transmitting memory pointers [Khacherian, paragraph 33]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use memory pointers rather then transmit the message in order to increase the throughput.

Regarding claim 2, IPMI Spec further discloses the channel center further comprises a plurality of channel application interfaces for receiving/sending a corresponding IPMI message from the message sources [IPMI Spec, paragraph 1.6.25].

Regarding claim 3, IPMI Spec further discloses at least one channel application interface correspondingly connects to a programmable-configured sheet for user

definition and provides the function of modular switch and renewal [IPMI Spec, paragraph 1.6.24].

Regarding claim 4, IPMI Spec further discloses the plurality of channel application interfaces comprises at least an intelligent platform management bus (IPMB) application interface [IPMI Spec, 1.6.16], a keyboard control style application interface (KCS) [IPMI Spec, paragraph 1.6.16], an intelligent chassis management bus (ICMB) application interface [IPMI Spec, paragraph 1.6.17], a universal asynchronous receiver / transmitter (UART) application interface [IPMI Spec, paragraph 1.6.17], and a local area network (LAN) application interface [IPMI Spec, paragraph 1.6.17].

Regarding claim 5, IPMI Spec-Khacherian further discloses at least one channel application interface stores the received IPMI message in the central message buffer unit [IPMI Spec, paragraph 1.6.3 – 1.6.4], and transmits a pointer of a corresponding address for the IPMI message [Khacherian, paragraph 33].

Regarding claim 6, IPMI Spec further discloses the IPMI message subsystem further comprises a message collection unit that collects in queue the pointers transmitted by each channel, application interface and transmits the pointers to the message execution group [IPMI Spec, figure 2-1, page 25, paragraph 3. System Interface, page 22, paragraph 2, PEF Device].

Regarding claim 7, IPMI Spec further discloses a plurality of message service modules which designates every IPMI message a default execution procedure correspondingly wherein at least one execution procedure instructs the application units of the IPMI core subsystem for executing said IPMI message [IPMI Spec, figure 2-1, page 25, paragraph 3. System Interface, page 22, paragraph 2, PEF Device];
a programmable-configured message sheet which allows the user to define the corresponding relation between every IPMI message and said message service module [IPMI Spec, page 16, paragraph 1.6.23 – 1.6.24]; and
at least one of multiple message processing units which looks up a corresponding message service module of the message sheet according to every IPMI message and initiates the execution procedure of the message service module [IPMI Spec, page 16, paragraph 1.6.23 – 1.6.24].

Regarding claim 8 IPMI Spec further discloses the message execution group further programmably configures the multiple message processing units that concurrently multi-process the IPMI messages to enable the advanced IPMI system configurable execution performance [IPMI Spec, paragraph 1.6.11].

Regarding claim 9, IPMI Spec-Khacherian further discloses the message processing units of the message execution group receive the pointers of the IPMI message and transmit the pointers to the application units of said IPMI core subsystem through the message service modules [Khacherian, paragraph 33].

Regarding claim 10, IPMI Spec further discloses the application units of said IPMI core subsystem read and process the IPMI message from the central message buffer unit according to the pointer [IPMI Spec, paragraph 1.6.4].

Regarding claim 11, IPMI Spec further discloses the application units of the IPMI core subsystem comprise at least a simple network management protocol (SNMP) trap, an event daemon, a sensor manager, a chassis controller, a platform event filter management unit (PEF), a chip management unit, an advanced configuration and power interface (ACPI), a basic general purpose input/output (GPIO), and a power manager [IPMI Spec, 2. Logical Management Device Types, pages 21-22].

Regarding claim 12, IPMI Spec further discloses the application units of the IPMI core subsystem generate a response message after the execution of said IPMI message [IPMI Spec, paragraph 1.6.4].

Regarding claim 13, IPMI Spec-Khacherian further discloses the application units of the IPMI core subsystem generate a response pointer of a corresponding address for temporary storage of the response message in the central message buffer unit [Khacherian, paragraph 33].

Regarding claim 14, IPMI Spec-Khacherian further discloses the IPMI core subsystem transmits the response pointer to the message execution group for releasing the allocated address of said IPMI message in the central message buffer unit [Khacherian, paragraph 33].

Regarding claim 15, IPMI Spec further discloses the response pointer transmitted through the message execution group to the original channel application allows the channel application interface to read a corresponding response message from the central message buffer unit and send it back to the message sources [IPMI Spec, paragraph 1.6.4].

Regarding claim 16, IPMI Spec further discloses an operating system (OS) management module having multiple specific mapping functions for communicating with different types of OS, allowing the advanced IPMI system to function with different OS [IPMI Spec, page 8, paragraph 1.6.2 – 1.6.3, figure 1-2].

Regarding claim 17, IPMI Spec, further discloses a hardware management module having a plurality of driver units for communicating with different baseboard management controllers (BMC), allowing the advanced IPMI system to function in different hardware environments [IPMI Spec, page 8, paragraph 1.6.2 – 1.6.3, figure 1-2].

Regarding claim 18, IPMI Spec further discloses a sensor unit having an electrically erasable programmable read only memory (EEPROM) which stores a sensing event of a physical change in a host system [IPMI Spec, figure 1-2, paragraph 1.6.14 and figure 2-1]; a cache unit which accesses and stores said sensing event to the EEPROM of the sensor unit [IPMI Spec, figure 1-2, paragraph 1.6.14 and figure 2-1]; a memory control unit which regularly polls a new sensing event in the EEPROM of the sensor unit, and allows the cache unit to access and store the sensing event [IPMI Spec, figure 1-2, paragraph 1.6.14 and figure 2-1].

Regarding claim 19, IPMI Spec further discloses the cache unit is a random access memory (RAM) and the sensor unit is an I^2C sensor [IPMI Spec, paragraph 29.15 and figure 2-1].

Regarding claim 20, IPMI Spec further discloses a plurality of I2C driver software for driving different I2C sensors [IPMI Spec, paragraph 29.15 and figure 2-1]; and an I2C driver management unit for managing said plurality of I2C driver with an application interface [IPMI Spec, paragraph 29.15 and figure 2-1].

Regarding claim 21, IPMI Spec further discloses wherein the message sources further comprise a host system and an operating terminal [IPMI Spec, paragraph 1.6.16 – 1.6.17].

Regarding claim 24, IPMI Spec-Khacherian further discloses a plurality of application units, at least one application unit executing the IPMI message according to the execution procedure [IPMI Spec, page 16, paragraph 1.6.23]; and
a central message buffer unit having a memory block which provides a pointer of a corresponding address for temporary storage of each IPMI message wherein the pointer transmitted by said application units, is used for reducing said application units times of reading the IPMI message and raising the performance of the IPMI system [Khacherian, paragraph 33].

Regarding claim 25, IPMI Spec further discloses the message processing units receive the pointers of the IPMI message and then transmit the pointers to the application units through the message service modules [IPMI Spec, paragraphs 1.6.3 – 1.6.4].

Regarding claim 26, IPMI Spec further discloses the application units read and process the IPMI message from the central message buffer unit according to the pointer [IPMI Spec, paragraphs 1.6.3 – 1.6.4].

Regarding claim 31, IPMI Spec-Khacherian further discloses a channel application interface receiving at least one IPMI message from the message sources [IPMI Spec, page 17, paragraph 1.6.25];

storing temporarily each said IPMI message in a central message buffer unit and therefore getting a pointer of a corresponding address in the buffer unit for each said IPMI message [Khacherian, paragraph 33];

transmitting said pointer to a message execution group [IPMI Spec, paragraphs 1.6.3 – 1.6.4];

by the message execution group, executing the IPMI message according to the pointer thereby generating a response message and a response pointer to a corresponding address for temporary storage of the response message in the central message buffer unit [[IPMI Spec, paragraph 1.6.24];

releasing allocation of the address of said IPMI message in the central message buffer unit according to the response pointer [IPMI Spec, paragraphs 5.2 – 5.3 and Table 5.2];

by said channel application interface which is ordered by the message execution group, sending back the response message to message sources [IPMI Spec, paragraph 1.6.4]; and releasing allocation of the address of the response message in the central message buffer unit by said channel application interface [IPMI Spec, paragraphs 5.2 – 5.3 and Table 5.2].

Regarding claim 32, IPMI Spec further discloses verifying the received IPMI message by the channel application interface when message sources are receiving at least one IPMI message [IPMI Spec, paragraph 1.6.4].

Regarding claim 33, IPMI Spec further discloses collecting in queue the pointers of the IPMI message by a message collection unit and transmitting the pointers to the message execution group [IPMI Spec, figure 2-1, page 25, paragraph 3 'System Interface', page 22, paragraph 2 'PEF Device'].

Regarding claim 34, IPMI Spec-Khacherian further discloses initiating a corresponding execution procedure according to the pointer by the message execution group and allowing at least one application unit to execute said IPMI message [IPMI Spec, paragraph 1.6.3 – 1.6.4];
generating a response message after the execution by the application units and generating a response pointer to a corresponding address for temporary storage of the response message in the central message buffer unit [Khacherian, paragraph 33]; and transmitting the response pointer from the application units to the message execution group for execution [IPMI Spec, paragraphs 1.6.3 – 1.6.4].

Regarding claim 35, IPMI Spec further discloses releasing by the message execution group the allocation of the address of said IPMI message in the central message buffer unit according to the response pointer [IPMI Spec, paragraph 1.6.4].

Regarding claim 36, IPMI Spec-Khacherian further discloses transmitting by the message execution group the response pointer to said channel application interface for reading the response message from the central message buffer unit and sending back

the response message to the message sources by the channel application interface [Khacherian, paragraph 33].

Regarding claim 37, IPMI Spec-Khacherian further discloses a central message buffer unit has a memory block for providing a pointer to a corresponding address for temporary storage of each IPMI message, the pointer is for transmission by said units, reducing times of reading the IPMI message and raising the performance of the IPMI system [Khacherian, paragraph 33].

Regarding claim 39, IPMI Spec-Khacherian further discloses by the channel center temporarily, storing each said IPMI message in a central message buffer unit and therefore getting a pointer to a corresponding address and transmitting said pointer to the message processing unit [Khacherian, paragraph 33].

Regarding claim 41, IPMI Spec-Khacherian further discloses the message processing units transmitting the pointers to the IPMI message through the message service modules to the application units for processing [Khacherian, paragraph 33].

Regarding claim 42, IPMI Spec further discloses the application units sending, reading, and processing the IPMI message from the central message buffer unit according to the pointer [IPMI Spec, paragraph 1.6.4].

Regarding claim 43, IPMI Spec further discloses the application units comprise at least a simple network management protocol (SNMP) trap, an event daemon, a sensor manager, a chassis controller, a platform event filter management unit (PEF), an I^2C driver management unit, a memory control unit, a chip management unit, an advanced configuration and power interface (ACPI), a basic general purpose input/output (GPIO), and a power manager [IPMI Spec, paragraph 2. Logical Management Device Types, pages 21-22].

Regarding claim 44, IPMI Spec discloses the message processing unit is a thread and the execution procedure of the message service module is a routine [IPMI Spec, paragraph 1.9]

Regarding claim 46, IPMI Spec discloses the message sources is a host system and / or an operating terminal [IPMI Spec, page 8, paragraph 1.6.2 – 1.6.3, figure 1-2].

Regarding claim 47, IPMI Spec further discloses the cache unit is a random access memory (RAM) and the sensor unit is an I^2C sensor [IPMI Spec, paragraph 29.15 and figure 2-1].

Regarding claim 48, IPMI Spec discloses at least an I^2C sensor for sensing a physical change in a host system [IPMI Spec, figure 2-1];

a plurality of I^2C driver software for driving different I2C sensors [IPMI Spec, paragraph 29.15]; and

an I^2C driver management unit for managing said plurality of I2C driver software with an application interface [IPMI Spec, figure 2-1, 29.15].

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM J. GOODCHILD whose telephone number is (571)270-1589. The examiner can normally be reached on Monday - Friday / 8:00 AM - 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WJG
04/04/2008

/Jason D Cardone/
Supervisory Patent Examiner, Art Unit 2145